Green Collar Jobs: Factors for Success

A Brief Look at Colorado

Craig Cox
Interwest Energy Alliance
to Utah Energy Forum
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WESTERN RESOURCE























































Popular Support for Renewable Energy



Colorado was first state to pass Renewable Energy Standard by popular vote with passage of Amendment 37 in 2004

Pro-Active Gubernatorial Support

"We believe that the 'Colorado Promise' is about the new energy economy where this state, Colorado, is a leader in renewable energy, in wind, solar and biofuels." [From acceptance speech, 7 November 2006]



Legislative Support

In recent years, state legislature has passed key legislation facilitating new transmission for renewable energy, doubling the state's renewable energy standard and spurring the clean energy market through various bills advancing renewable energy and energy efficiency technologies.



Policy Support from Executive and Legislative Branches

HB 08-1164: Promoting utility-scale solar energy

HB 08-1368: Exempting renewable energy equipment from state sales taxation

HB 08-1225: Raises business personal-property tax exemption to \$7,000 over five years — freeing 30,400 additional businesses from a nuisance tax that often costs far more in accountants' fees to calculate than it raises for local governments.

HB 08-1380: Simplifies Colorado's corporate tax structure by establishing a "single sales factor" for multistate corporations.

HB 08-1183: To make it easier for small rural businesses to qualify for job-creation incentives.



Local/County Support

Vestas incentives top \$31 million

By James Amos
The Pueblo Chieftain, 13 September 2008

"The city and county, the state of Colorado and the federal government combined to put \$31.8 million on the table to bring the new Vestas windmill tower plant to Pueblo.

Much of the money came from the city of Pueblo's special economic development fund. The money comes from a half-cent sales tax Pueblo voters have reauthorized several times to attract prospective businesses. Pueblo voters agreed in 2007 also to allow some of the money to be used to train workers for the new businesses.

Keith Swerdfeger, interim president of the Pueblo Economic Development Corp., said Friday that the money given to Vestas represents a good investment for Pueblo. One economic model shows that the Vestas plant, its equipment and its 450 jobs will bring more than \$1 billion in economic activity for the Pueblo area in the next 10 years."

Follow-on Local Benefits from Plant Development

Vestas to Anchor New Southern Industrial Park

By Dennis Darrow, The Pueblo Chieftain, 22 August 2008

"The addition of the Vestas plant and the industrial park "is a godsend," Aguilera said. "The South Side will really be a new area of Pueblo with wonderful development."

[...]

"Everything we are doing from an infrastructure standpoint allows us to serve many more acres than Vestas. We open up the area for development," Centa said. The city of Pueblo plans to annex the Vestas land into the city and use part of the tax revenue generated by the plant to assist with funding the infrastructure upgrades, including utilities.

(emphasis added)

Partnership with Community Colleges and Research Institutions

"Four major educational institutions in Northern Colorado have opted to collaborate rather than compete in the name of work force development.

Officials from CSU, the University of Northern Colorado, Front Range Community College's Larimer Campus and Aims Community College in Greeley announced Friday that the institutions must work together to keep up with the pace of changing work force demands to produce employees companies want and need."

—From Fort Collins Coloradoan, 13 September 2008

Colorado Renewable Energy Collaboratory

Established in 2007, the Colorado Renewable Energy Collaboratory is a research partnership among the National Renewable Energy Laboratory and Colorado's premier research universities – Colorado State University, the University of Colorado at Boulder and Colorado School of Mines. It works with public agencies, private enterprise, nonprofit institutions and all of Colorado's universities and colleges to:

- Increase the production and use of energy from renewable resources like wind energy, solar energy, and biofuels
- Support economic growth in Colorado and the nation with renewable energy industries
- Build a renewable energy economy in rural Colorado and rural America
- Establish Colorado as America's leading center of renewable energy research and production
- Educate our nation's finest energy researchers, technicians and work force

Aggressive State Economic Development Office

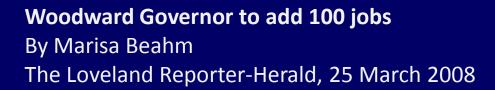
"Where we're having success is in building the culture of a new-energy economy," said Matt Cheroutes of Gov. Ritter's Office of Economic Development and International Trade.

Cheroutes credits not only Ritter's aggressive pursuit of his "new-energy economy" and the state's natural abundance, but its favorable business climate and human resources...his office has been focusing in particular on attracting green-energy industry.

"One of the things we've been doing is trying to match our intellectual resources with the natural resources," he said. "We have research talent in our world-class research institutions, and having the Colorado Renewable Energy Collaboratory in our back yard has been extremely helpful in attracting business."

—From Energy Prospects West, 1 April 2008

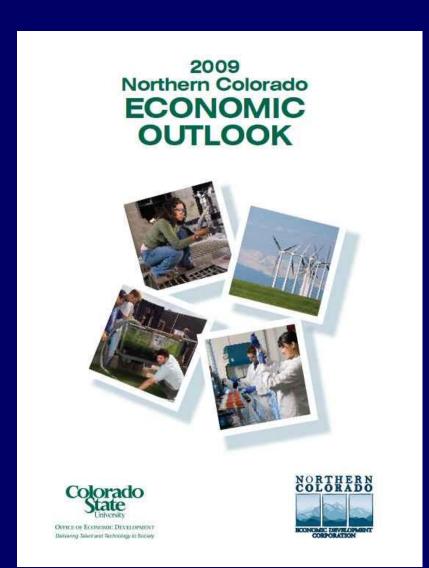
Initial signs of "spin-off" effect





Woodward Governor Co. will add 100 new jobs in Northern Colorado by expanding its wind turbine inverter business. The Fort Collins-based company will start a new production line for turbine inverters, which are used to convert a wind turbine's variable output into grid-compatible electrical power, according to a Woodward release.

Diversification: Economic Stability



"When I think about 2009, I'm not scared," Colorado State University economist Martin Shields told his audience at the 2009 Northern Colorado Economic Outlook at the Marriott Fort Collins. "I'm nervous, but I'm not scared. ...We've got a strong and diversified economy."

Shields built a case for relative economic stability in the region partly on the potential development of the renewable energy sector, led by such companies as AVA Solar Inc. and Vestas Wind Systems A/S.

—From Northern Colorado Business Report, 2 October 2008 [emphasis added]

Pro-active Utilities

Xcel Energy:

- Nation's leading windpower utility and one of nation's leading solar utilities
- Trailblazing plan to close smaller, obsolete coal plants recently approved by PUC
- Currently implementing "Smart Grid" in city of Boulder
- Similar pro-activity in other Xcel units (e.g., in Minnesota)





Other utilities in Colorado:

- Delta-Montrose rural coop: leader in geoexchange and efficiency programs
- Lamar municipal: community wind project
- Holy Cross rural coop: vowed to double its RPS requirements voluntarily

...and others

Activities in other States

New Mexico: Schott Solar manufacturing plant in Albuquerque, employing 350 people initially, with up to 1,500 employees projected

<u>New Mexico</u>: Mesalands Community College signed agreement on 30 May 2008 with GE in which all graduates of its Wind Energy Technology Program will be guaranteed a job with GE.

<u>Nevada</u>: Ausra Solar has opened a manufacturing plant near Las Vegas initially employing 50 people

<u>Nevada</u>: "Answering the challenge to tap into Nevada's abundant solar, wind and geothermal resources, Truckee Meadows Community College announced it will offer students a renewable energy program next year to meet the needs of a growing industry."

<u>Arizona</u>: "The mission of Northern Arizona University's Sustainable Energy Solutions (SES) Group is to provide society with broadly educated energy experts and new technologies, as well as to help shape energy decision-making in both the private and public sectors while increasing the public's energy literacy."

<u>Wyoming</u>: "Wyoming has wind resources capable of utility-scale production, according to the U.S. Department of Energy, but the state also has a shortage of wind technicians...The [Laramie County Community College] college is doing its part to fill that shortage by launching a wind energy program."

This is just an illustrative snapshot of a few of the many activities underway throughout the West.



Activities in Utah

<u>Strong Gubernatorial Support</u>: Working 4 Utah, Utah Renewable Energy Zones initiative, Executive Orders on Energy Efficiency and Climate Protection

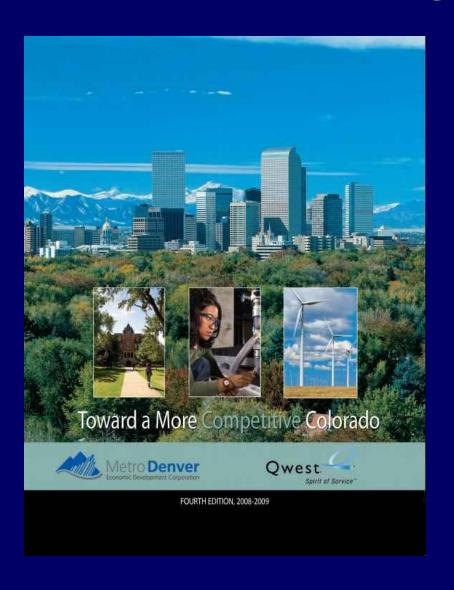
Increasing Legislative Support: 2007 renewable energy systems tax credits; Clean Air and Efficient Vehicle Tax Incentives; Net Metering Programs; Revolving Loan Fund for efficiency for K-12 schools; State Fleet Efficiency Requirements; Incentives for Clean and Efficient Vehicles; Energy Resource and Carbon Emission Reduction Initiative; State sales tax exemption for renewable energy equipment; Solar Energy Generation Tax Credit for Municipal Solar Power Projects

<u>Partnerships with Academia</u>: USU's Renewable Energy for Rural Economic Development program; worker-training programs at community colleges

<u>Utility Clean Energy Programs</u>: Blue Sky green-pricing and community grant programs; St. George Municipal Net Metering and Solar Rebate Program; Logan Municipal Net Metering and Solar Rebate Program; Murray Power municipal landfill gas project; other municipals and coops with green pricing and net metering

Utility commitments to transmission upgrades: PacifiCorp system-wide

Colorado, looking over its shoulder



"This year we also added Utah into our "Competitor States" analysis, since this neighboring state has emerged in the past two years as a significant force in the West. While Utah has yet to reach the economic stature of our fiercest competitors for new jobs and investment –Texas and Arizona– we anticipate that Utah will continue to assert itself economically in the coming years."

From report, "Toward a More Competitive Colorado,"
 issued by the Metro Denver Economic Development
 Corporation, 17 October 2008

Bottom Line: Partnerships and Cooperation

- No "magic bullet," particularly in budgetconstrained states
- Partnerships and coalitions, formal and informal, are key to leveraging green collar job growth
 - Involvement of citizens, elected officials, state agencies, economic developers, educational institutions and other sectors

Thank you!



Craig Cox
Interwest Energy Alliance
www.interwest.org
cox@interwest.org
303-679-9331